

- According to DIN EN 61810-1, DIN EN 61810-3 (Type A resp. Type B)
- With forcibly guided contacts
- Clearance and creepage distances:
Contact - coil ≥ 8 mm
Contact - contact $\geq 5,5$ mm
Double and reinforced insulation between contacts
- Low rated power consumption
- High voltage resistance ≥ 4 kV at pollution degree 2
- High mechanical service life
- Compact size, small height

Applications

- Switchgear for safety technology
- Press controls

Approvals and Markings



Technical Data

Relay type	OA 5667.____/____4	
1.0 Relay coil		
1.1 Nominal voltage	DC 6; 12; 24; 48; 60; 110 V	
1.2 Nominal consumption	0.75 W	
1.11 Voltage range	0.75 ... 1.3 U _N	
1.13 Holding Power (at 0.5 x U _N)	0.19 W	
2.0 Contacts		
2.1 Contact arrangement	2 changeover contacts (Type B) / 1 NO, 1 NC (Type A)	
2.2 Contact material	AgSnO ₂ + 0.2 μm Au; AgNi + 0.2 μm Au, AgNi + 5 μm Au	
2.3 Rated insulation voltage	AC 250 V	
Switching voltage min./max.	AC/DC 10 V / DC 250 V, AC 400 V (AC/DC 2 V / 60 V) ¹⁾	
2.4 Limiting continuous current I _{th}	2 x 6 A (see operating voltage limit curve)	
Switching current min./max.	10 mA ³⁾ / 6 A (2 mA / 0.3 A) ¹⁾	
2.5 Switching power min./max.	0.1 VA / 1500 VA (10 mVA / 12 VA) ¹⁾	
Switching power min./max.	0.1 W / 200 W (10 mW / 12 W) ¹⁾ (see limit curve for arc-free operation)	
2.6 Switching capacity to IEC/EN 60947-5-1		
AC 15 ⁴⁾	NO: AC 250 V / 3 A	NC: AC 250 V / 1 A
AC 15 ⁵⁾	NO: AC 250 V / 3 A	NC: AC 250 V / 1 A
DC 13 ⁴⁾	NO: DC 24 V / 2 A	NC: DC 24 V / 1 A
DC 13 ⁴⁾ at 0.1 Hz	NO: DC 24 V / 4 A	NC: DC 24 V / 3 A
to UL 508	R300	
2.7 Electrical life	At 1 s On, 1 s Off (see contacts service life)	
at AC 250 V, 6 A, cos φ = 1	> 10 ⁵ switching cycles AgNi 10	> 1.25 x 10 ⁵ switching cycles AgSnO ₂
2.8 Switching frequency max.	10 switching cycles/s	
2.9 Response time / Release time	Typically 10 ms / Typically 6 ms	
2.10 Contact force NO / NC	≥ 20 cN / ≥ 8 cN	
2.14 Contact gap	> 0,5 mm ²⁾	
3.0 Other		
3.1 Mechanical life	≥ 10 ⁷ switching cycles	
3.2 Temperature range	- 40 ... + 85 °C	
3.3 Degree of protection, housing	Solder line proof RT II	
3.4 Test procedure	A (group mounting)	
3.5 Vibration resistance	10 ... < 60 Hz; 0,35 mm Amplitude IEC/EN 60068-2-6 60 ... 200 Hz, ≤ 4g (all contacts) IEC/EN 60068-2-6	
3.6 Climate resistance	40 / 085 / 04; A/B/D IEC/EN 60068-1	
3.7 Short circuit strength 1 kA / AC 250 V	AgNi or AgSnO ₂ 6 A gG / gL IEC/EN 60947-5-1	

¹⁾ Values for AgNi 10-contacts + 5 μm Au

²⁾ Over entire service life acc. to DIN EN 61810-3

³⁾ Typical values

⁴⁾ Values for AgNi-contacts

⁵⁾ Values for AgSnO₂-contacts

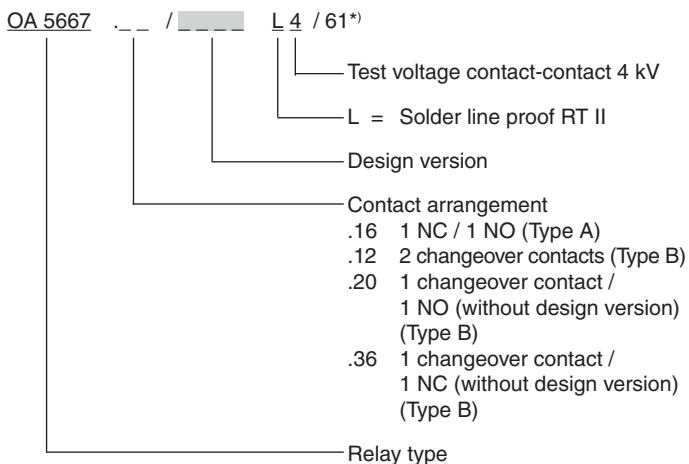
Technical Data

3.8	Insulation acc. to IEC 60664-1, EN 50178	Double and reinforced insulation
	Rated insulation voltage	AC 250 V
	Pollution degree	2
	Overtoltage category	III
	Test voltage	
	Contact-coil (1 min)	≥ AC 4 kV eff.
	Contact-contact (1 min)	≥ AC 4 kV eff.
	Contact open (1 min)	≥ AC 1.5 kV eff.
	Transient voltage	
	Contact-coil (1.2 - 50 μs)	≥ 6 kV
	Clearance and creepage distances	
	Contact-coil	≥ 8 mm
	Contact-contact	≥ 5.5 mm
3.9	Weight	Approx. 17 g
4.0 Packing		
4.1	On cardboard	24 pieces
4.2	In case package	240 pieces
5.0 Solder method		
5.1	Solder method /-temperature /-duration	Wave soldering / 260 °C / 5 s

Design versions

U _N (DC V)	Voltage range (DC V)	R _{Coil} Ω ± 10%	AgNi10-contacts + 0,2 μm Au		AgNi10-contacts + 5 μm Au	
			OA 5667.12 2 C/O	OA 5667.16 1NO, 1NC	OA 5667.12 2 C/O	OA 5667.16 1NO, 1NC
6	4.5 ... 7.8	48	2861	2891	2871	2901
12	9.0 ... 15.6	183	2862	2892	2872	2902
24	18.0 ... 31.2	750	2863	2893	2873	2903
48	36.0 ... 62.4	3200	2864	2894	2874	2904
60	45.0 ... 78.0	4700	2865	2895	2875	2905
110	82.5 ... 143.5	15300	2866	2896	2876	2906

Ordering Example

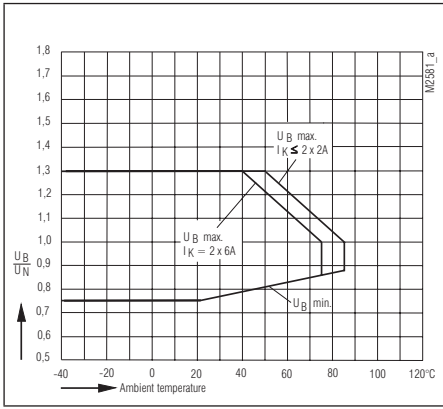


*) /61 cURus approval

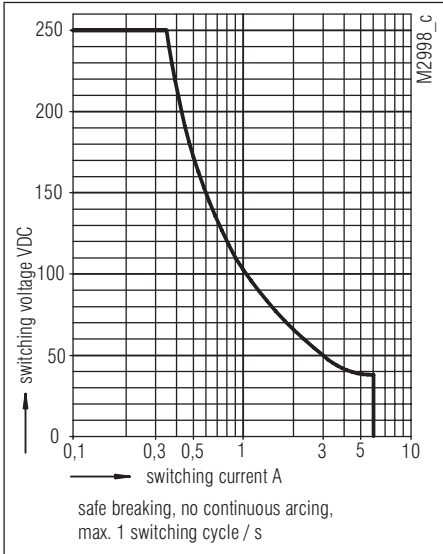
Notes

For the use and processing of our PCB relays, please refer to the **application and processing instructions** at www.dold.com

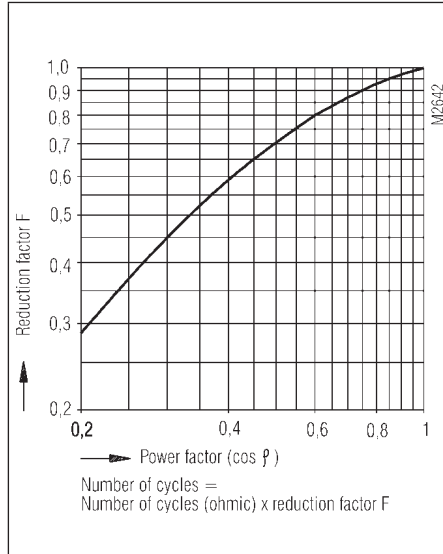
Characteristics



Operating voltage limit curve



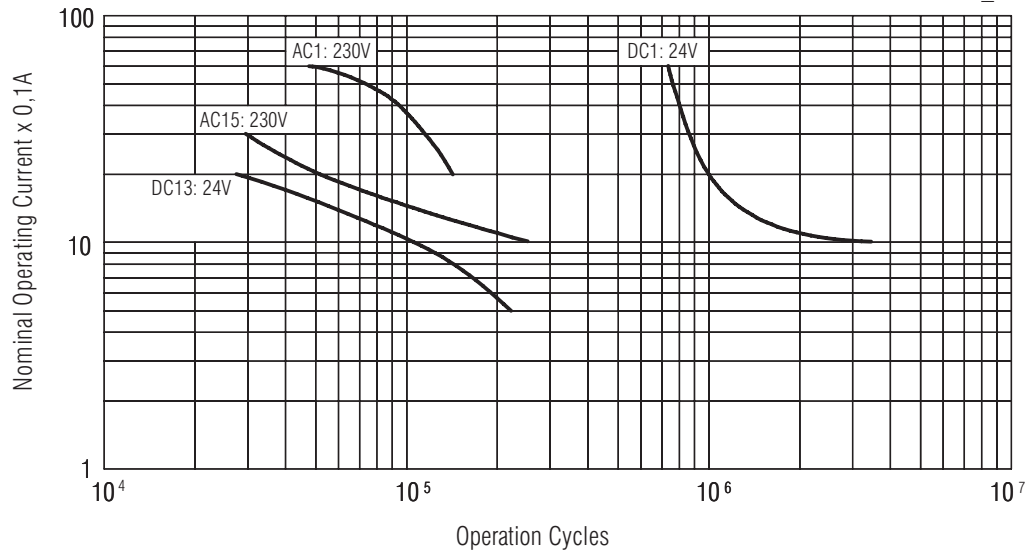
Arc limit curve



Reduction factor for inductive loads

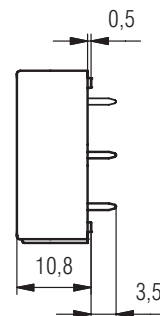
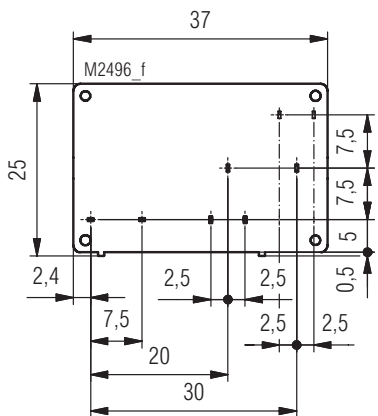
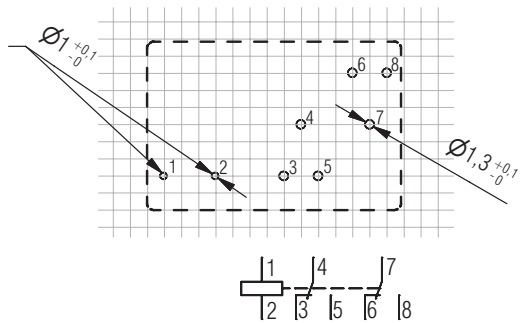
Electrical life of the output contacts determined by
DIN EN 60947-5-1 / Annex C.3

M4727_a

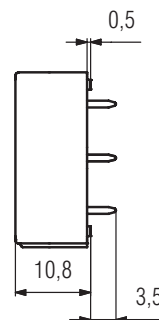
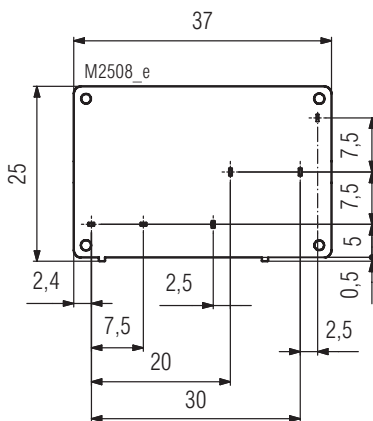
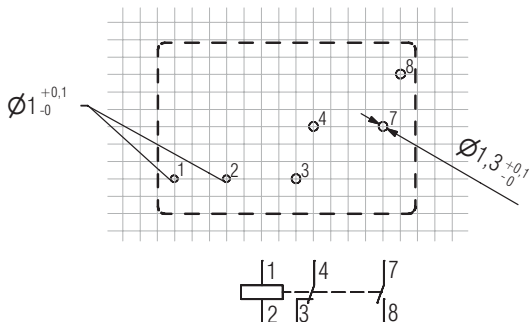


Electrical life

Drilling plan (solder side)



OA 5667.12/...L4
 OA 5667.20/...L4 contact 6 not fitted



OA 5667.16/...L4

Connection for basic grid dimensions 2.5 mm as well as 2.54 mm according to IEC/EN 60097 and IEC 60326 average